

INTERSTATE COMMERCE COMMISSION
WASHINGTON

INVESTIGATION NO. 3215
CHICAGO AND WESTERN INDIANA RAILROAD COMPANY
REPORT IN RE ACCIDENT
AT DOLTON, ILL., ON
NOVEMBER 17, 1948

SUMMARY

Railroad: Chicago and Western Indiana

Date: November 17, 1948

Location: Dolton, Ill.

Kind of accident: Collision

Equipment involved: Cut of C. and W.I. : C. & E.I.
passenger-train passenger
cars train

Train number: : 25

Engine numbers: 210 : Diesel-electric
unit 1102

Consists: 4 cars : 4 cars

Estimated speed: Standing : 30 m. p. h.

Operation: Timetable and automatic block-signal
system; yard limits

Tracks: Double; tangent; 0.31 percent
ascending grade southward

Weather: Clear; dark

Time: 6:37 p. m.

Casualties: 61 injured

Cause: Failure to operate passenger train in
accordance with signal indication

INTERSTATE COMMERCE COMMISSION

INVESTIGATION NO. 3215

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS
UNDER THE ACCIDENT REPORTS ACT OF MAY 6, 1910.

CHICAGO AND WESTERN INDIANA RAILROAD COMPANY

February 9, 1949

Accident at Dolton, Ill., on November 17, 1948, caused
by failure to operate a passenger train in accordance
with a signal indication.

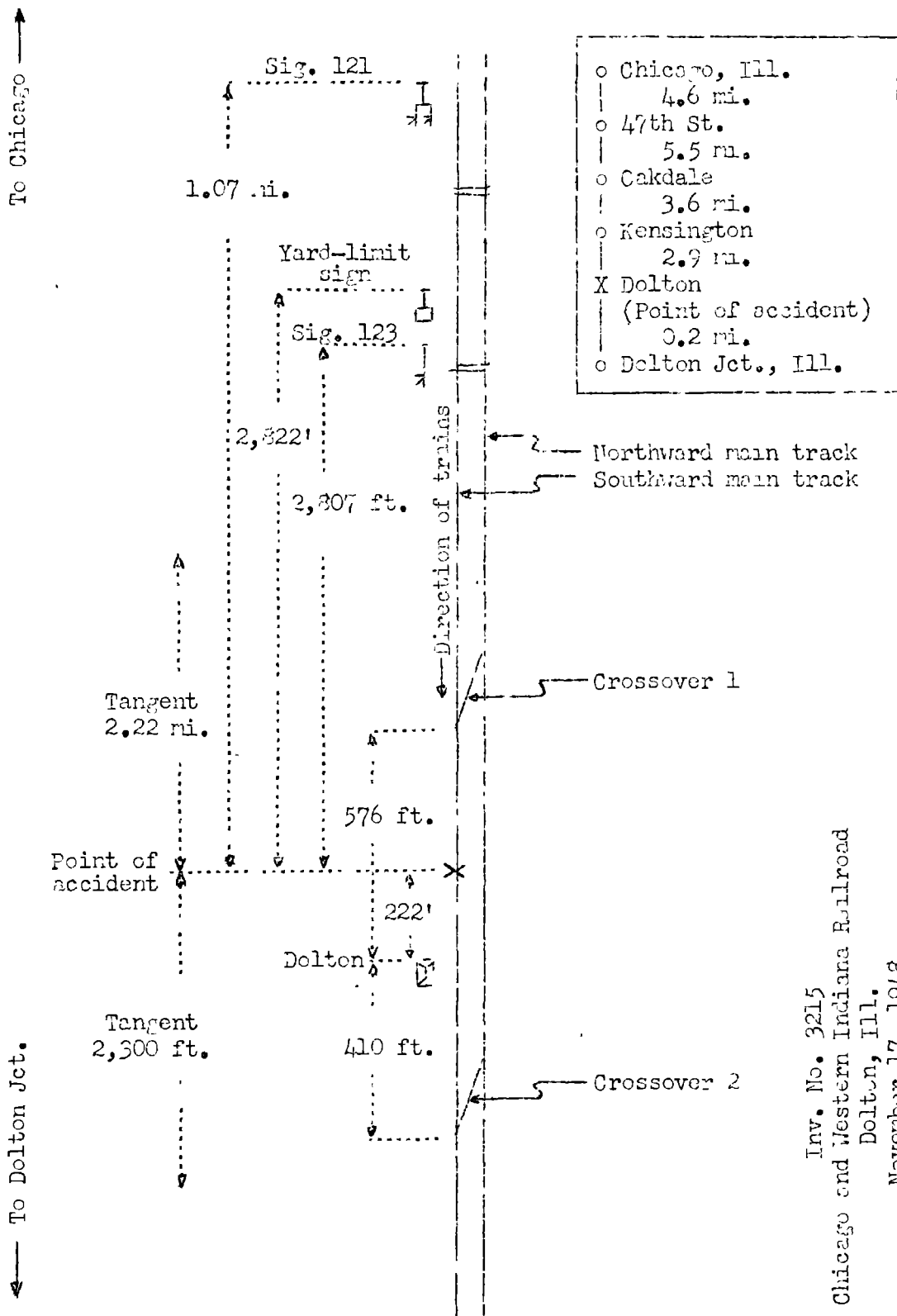
REPORT OF THE COMMISSION¹

PATTERSON, Commissioner:

On November 17, 1948, there was a collision between a Chicago and Eastern Illinois Railroad passenger train and a cut of passenger-train cars on the Chicago and Western Indiana Railroad at Dolton, Ill., which resulted in the injury of 56 passengers, 3 dining-car employees and 2 train-service employees.

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Under authority of section 17 (2) of the Interstate Commerce Act the above-entitled proceeding was referred by the Commission to Commissioner Patterson for consideration and disposition.



Inv. No. 3215
Chicago and Western Indiana Railroad
Dolton, Ill.
November 17, 1948

Location of Accident and Method of Operation

This accident occurred on that part of the line which extends between Chicago and Dolton Jct., Ill., 16.8 miles. In the vicinity of the point of accident this is a double-track line, over which trains moving with the current of traffic are operated by timetable and an automatic block-signal system. Trains of the C. & E.I. are regularly operated over this line. At Dolton, 16.6 miles south of Chicago, two hand-operated trailing-point crossovers, designated from north to south as crossovers 1 and 2, connect the main tracks at points, respectively, 576 feet north and 410 feet south of the station. The accident occurred within yard limits on the southward main track at a point 222 feet north of the station. From the north the main tracks are tangent throughout a distance of 2.22 miles to the point of accident and 2,500 feet southward. The grade is 0.31 percent ascending southward.

Automatic signals Nos. 121 and 123, governing south-bound movements on the southward main track, are, respectively, 1.07 miles and 2,307 feet north of the point of accident. These signals are of the one-arm semaphore type, and they display three aspects. They are continuously lighted. The involved night aspects and corresponding indications of these signals are as follows:

<u>Signal</u>	<u>Aspect</u>	<u>Indication</u>
121	Yellow	CAUTION; proceed carefully
123	Red	STOP; proceed under control

The controlling circuits of these signals are so arranged that when the block of signal 123 is occupied that signal indicates stop-proceed-under-control, and signal 121 indicates caution-proceed-carefully.

The north yard-limit sign is located 2,822 feet north of the point of accident.

This carrier's operating rules read in part as follows:

DEFINITIONS.

UNDER CONTROL.--Being able to stop within the distance track is seen to be clear.

83. A train must not leave its initial station * * * until it has been ascertained whether all superior trains due have left.

85. When a train of one schedule is on the time of another schedule of the same class it will proceed on its own schedule.

Trains of the same class may pass and run ahead of each other without special order.

87. An inferior train must clear the time of a first class train not less than five minutes; but must be clear at the time a first class train in the same direction is due to leave the next station in the rear where time is shown.

93. Within yard limits the main track may be used, protecting against first class trains.

* * *

99. When a train stops or is delayed under circumstances in which it may be overtaken by another train, the flagman must go back immediately with stop signals a sufficient distance to insure full protection. When recalled he may return to his train, first placing two torpedoes on the rail, when the conditions require it, and, when added protection is needed, a lighted fusee must be used.

The front of a train must be protected in the same way when necessary, by the front brakeman or fireman.

Timetable special rules read in part as follows:

2. All trains departing from Dearborn Station will receive from the C. & W. I. Dispatcher's office a clearance card as authority for movement.

AB-3. Block signals will not relieve trainmen from properly protecting their train by flag as required by the rules.

AB-5. When a train is stopped by an automatic block signal if the signal does not clear at once train may proceed under control not to exceed 15 miles per hour, expecting to find train in block, broken rail or switch not properly set.

AB-10. Block signals control the use of the blocks, but unless otherwise provided, do not affect the superiority of trains under the time table or train rules, nor dispense with the use or the observance of other signals whenever and wherever they may be required.

The maximum authorized speed for passenger trains is 60 miles per hour.

Description of Accident

No. 75, a south-bound first-class C. and W.I. passenger train, consisted of engine 210, three coaches and one baggage car, in the order named. All cars were of all-steel construction. This train arrived at Dolton about 6:30 p. m., and stopped with the rear end standing 222 feet north of the station. Soon afterward the engine was detached, and it proceeded southward to crossover 2, backed through the crossover to the northward main track and was proceeding toward crossover 1 when the most northerly of the cut of cars standing on the southward main track was struck by No. 25.

No. 25, a south-bound first-class C.& E.I. passenger train, consisted at the time of the accident of Diesel-electric engine 1102, one grill car and three coaches, in the order named. All cars were of lightweight-steel construction. This train departed from Chicago at 5:10 p. m., on time, entered a siding at 47th Street, 12 miles north of Dolton, to change engines, passed Oakdale, the last open office, 6.5 miles north of Dolton, at 6:28 p. m., 58 minutes late, and while moving at an estimated speed of 30 miles per hour it struck the north end of the cut of passenger-train cars standing on the southward main track.

The rear car of the cut of cars was telescoped a distance of about 15 feet. The cut of cars was moved southward a distance of 401 feet but remained on the track. The rear car was practically demolished, and the other three cars were badly damaged. The front wheels of the rear truck of Diesel-electric unit 1102 were derailed, and the front end was badly damaged.

The engineer and the fireman of No. 25 were injured.

The weather was clear and it was dark at the time of the accident, which occurred at 6:37 p. m.

Discussion

The rules governing operation on that part of the line on which the accident occurred provide that trains of the same class may pass and run ahead of each other without special order. An inferior train must clear the time of a first-class train not less than 5 minutes. Flag protection is required against first-class trains for any train or equipment occupying a main track within yard-limits. Block signals do not relieve trainmen from properly protecting their train by flag. A train may, after stopping, pass an automatic block signal indicating stop, and proceed into the block in such manner that it can be stopped within the distance the track is seen to be clear but at a speed not exceeding 15 miles per hour. All employees involved understood these requirements.

No. 75 is scheduled daily, except Sunday, to arrive at Dolton, its final terminal, at 6:34 p. m. The crew consists of the engineer, the fireman, the conductor and the flagman. Upon arrival at Dolton, passengers are discharged, then the conductor reports by telephone to the dispatcher the time of arrival of the train at Dolton. There is no operator on duty at Dolton. The conductor then obtains orally from the dispatcher pertinent information concerning the movements of other trains on the northward main track at Dolton. During this time the flagman removes the marker lamps from the rear of the last car. He then detaches the engine, which is moved southward to a point south of the south switch of crossover 2. He operates the switches of crossover 2, through which the engine is backed to the northward main track. After the switches of crossover 2 are operated to their normal position, the engine then is moved northward to a point north of crossover 1. The flagman reverses both switches of crossover 1, the engine is moved through the crossover to the southward main track, and then the engine is attached to the cut of cars. After the marker lamps are placed in proper position and passengers are loaded, this movement then proceeds northward on the southward main track, then through crossover 1 to the northward main track, and there it assumes the schedule of No. 74, a north-bound, first-class passenger train. This train is scheduled to leave Dolton at 6:40 p. m., 6 minutes after the arriving time of No. 75 at that station.

The investigation disclosed that the conductor of No. 75 ascertained from the train register at Chicago that No. 25, scheduled to leave Chicago at 5:10 p. m., had departed from that station on time. No. 75 departed from Chicago at 5:43 p. m. and stopped on the southward main track at Oakdale, 6.5

miles north of Dolton, at 6:12 p. m., where station work was performed. The operator at Oakdale orally informed the conductor of No. 75 that his train had passed No. 25 at 47th St., 12 miles north of Dolton, and that No. 25 would be 55 minutes late. The conductor said he understood the operator to say that No. 75 had passed No. 25 at 47th St. and that No. 25 would arrive at Oakdale at 6:40 or 6:50 p. m., and so informed the flagman. The conductor said that, because No. 74 was scheduled to leave Dolton at 6:40 p. m. and since No. 25 would not arrive at Dolton before 7 p. m., if it passed Oakdale at 6:50 p. m., he did not tell the enginemen that their train had passed No. 25, as that information would be of no value to them. The engineer said that he saw a passenger train at 47th St. and so informed the fireman, but neither identified the train as No. 25. No. 75 departed from Oakdale at 6:13 p. m., and stopped on the southward main track at Dolton at 6:30 p. m. The flagman removed the marker lights from the brackets on the rear of the last car just before the train reached Dolton, and he said that he placed a lighted red lantern on the north end of this car. After the stop was made, the conductor reported by telephone to the dispatcher that No. 75 had arrived at Dolton at 6:30 p. m., and that No. 74 would depart from that station at 6:40 p. m. The dispatcher reminded the conductor that only a short time remained for their movement to clear No. 25. Upon arrival at Dolton, the flagman detached the engine without closing the angle cock on the car behind the engine. This caused the brakes on the cut of cars to be applied in emergency. The engine then was moved southward and backed through crossover 2 to the northward main track. After both switches of crossover 2 were lined for normal main track movements, the engine was moved northward on the northward main track. The engineer and the fireman were in their respective positions in the engine cab and were maintaining a lookout to the north. The headlight on the rear of the tender was lighted brightly. The flagman was on the left pilot-step of the engine and the conductor had boarded the engine a short distance north of the crossover and was on the right pilot-step. The engineer and the conductor observed the approaching headlight of No. 25 but they said that they thought it was an extra train, and they took no action to provide flag protection. The collision occurred 3 minutes after the termination of the schedule of No. 75, when their engine was adjacent to the cut of cars. The crew of No. 75 said that previously under similar conditions they had not furnished flag protection at Dolton, and that they had never been criticized by any official for not doing so. They said they relied to a certain extent on automatic block signals to protect the switching movements at Dolton.

No. 25 departed from Chicago at 5:10 p. m., on time, stopped at 47th St. at 5:21 p. m., and cleared the main track because of defective brake equipment on the engine. After another engine had been attached, this train entered the southward main track, and departed from 47th St. at 5:17 p. m., 58 minutes late and 24 minutes after No. 75 had passed that station. No. 25 passed Oakdale at 6:28 p. m., 53 minutes late and 15 minutes behind No. 75. As this train approached Dolton, the enginemen were in their respective positions in the control compartment at the front of the Diesel-electric unit. The headlight and the oscillating signal light were lighted. The brakes of this train had been tested and had functioned properly en route. The members of the train crew were in various locations throughout the train. Signal 121 indicated caution-proceed-carefully and signal 123 indicated stop-proceed-under-control. The enginemen called the indications to each other. The train was stopped at signal 123, then it immediately proceeded. The engineer said that the throttle was in No. 3 pulling position. Both enginemen said that the rear headlight on the engine on the northward main track prevented them from seeing the cut of cars on the southward main track until their engine was within 25 feet of the most northerly car. At that time the speed had been increased to about 30 miles per hour. The engineer placed the brake valve in the emergency position, but the collision occurred before the brakes became applied.

Cause

It is found that this accident was caused by failure to operate a passenger train in accordance with a signal indication.

Dated at Washington, D. C., this ninth
day of February, 1949.

By the Commission, Commissioner Patterson.

(SEAL)

W. P. BARTEL,
Secretary.